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Exploration of the relationships between strengths, academic performance, and classroom behavior in young students

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AN EXPLORATION OF THE RELATIONSHIPS BETWEEN STRENGTHS, ACADEMIC PERFORMANCE, AND CLASSROOM BEHAVIOR IN YOUNG STUDENTS

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Abstract

Positive psychology is a theoretical framework, which emphasizes the importance of understanding and utilizing individuals' strengths, as opposed to focusing on their deficits. Since this framework is relatively new, there is little research that has explored the utility of strengths in a school setting, and in particular, the relationship between young students' strengths, their academic performance, and classroom behavior. The current study examined these relationships through the use of 3 questionnaires: 1) the Teacher Rating Scale (TRS) of the Behavioral Emotional Rating Scales (BERS 2; Epstein, 2004), 2) a modified version of the Strength Assessment Inventory (SAI; Rawana, Brownlee, & Hewitt, 2006), and 3) a modified version of the Teacher Report Form (TRF) from the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001). It was hypothesized that: 1) all students, regardless of academic performance and behavior, will have some strengths in all domains measured, 2) strengths will be positively correlated with academic performance, 3) scores on the BERS 2 will be negatively correlated with scores on the TRF, and additionally, 4) total scores on the BERS 2 and the SAI will be highly positively correlated and those scales that measure overlapping content areas will be more highly correlated than other scales. Data was analyzed using both Pearson correlations and canonical correlations, and yielded results that supported all hypotheses. Perhaps most interestingly, strengths were found to be related to both performance and behavior, however, the nature of the relationship was different for boys and girls.

Positive psychology is a field of study that focuses on human strength and virtue (Lopez, 2000). A major goal of positive psychology is to foster strengths and virtues in young people and to help people gain control over their strengths and virtues (Seligman, 1998, as cited in Lopez, 2000). The overall purpose is to help individuals avoid negative outcomes and to facilitate positive outcomes.

In contrast with positive psychology theory, traditional psychological services have been derived from a medical model. One main premise of this latter model is that an "expert" is to provide a diagnosis for some type of problem (Corcoran, 1998). Within this model the mindset for psychologists, social workers, educational staff, and others who provide services to children has been to focus more on deficits, problems, and pathologies, rather than children's strengths. This well-known framework is referred to as the deficit-based approach. The two main purposes of this approach are to identify problems, and to assess the outcomes of treatments (Trout, Ryan, La Vigne, & Epstein, 2003).

The deficit-based approach to assessment and treatment does not adequately examine all essential components of children's cognitive schemas, personality strengths, and positive environmental influences. In addition, the framework does not adequately recognize that individuals are not composed solely of a series of problems, but that they also have many desirable qualities and strengths. The traditional "problem fixing" strategy is seen as being somewhat pessimistic, and as a result, the approach can negatively taint the perspectives of all parties involved in interventions or treatments. It has been suggested that having such a negative, one-sided focus handicaps both the therapist and the client (Walker & Lee, 1998).

In contrast, the aforementioned framework of positive psychology represents a marked deviation from the traditional focus of psychology, which was largely concerned with pathology, dysfunction, and disorder. Within this new framework, problems are reframed in a non-pathological manner; focus is placed on the whole individual, things they do particularly well, and the possibility of their strengths in one area helping them succeed in other areas. One of the major differences in this approach is that instead of focusing on risk factors and problem development, psychologists have begun to focus on the importance of strengths and problem resolution. That is, they are beginning to appreciate the potential of strengths to be the basis of interventions and treatment programs designed to help children overcome problems by using their strengths.

The strength-based approach of positive psychology is generally seen as being more optimistic and holistic in nature, and is considered to be at the opposite end of a continuum in comparison to traditional deficit-based approaches. This approach is seen as more empowering, hopeful, and solution-focused (Corcoran, 1998). This model allows psychologists and family members to view the full potential of the child, and recognize the areas that could use further development. This approach also allows adults in the child's life to recognize the areas that he/she is likely to easily attain success in and the areas that may require additional effort. This knowledge allows adults to set more appropriate expectations for the child (Walrath, Mandell, Holden, & Santiago, 2004).

The current study aims to link the theories of positive psychology with issues within the realm of school psychology by examining the strengths of young students. This study will both, add to research that illustrates the importance of the positive psychology approach, and more specifically, examine the relationship between young

students' strengths, their academic performance, and classroom behavior. In essence, this thesis will attempt to bridge positive psychology and school psychology and support the idea that all students have strengths (see Walrath et al., 2004). In theory, these strengths, once identified, could be used to assess and treat children with a range of problems of varying severity. In essence, students' strengths could potentially be used to help them build skills in areas where they have difficulties.

It is important to study the utility of positive psychology within school systems for a number of reasons. First, deficit-based intervention plans for struggling students that are developed as a result of poor school performance or classroom behavior, may have negative effects on a student's motivation. Second, these types of interventions may result in students feeling as though their teachers dislike them. This point is important to consider because early student-teacher relationships can have long lasting effects on a child's education and can affect the child's view of themselves as students (Seifert, 2004). Third, the student may believe that their teacher views them as being incompetent. This is important because it is essential that students feel competent in order to develop into healthy, adaptive individuals. Finally, a child's strengths affect their interactions with parents, teachers, and peers; and in turn, their strengths affect their development and behavior (Brofenbrenner, 1979, as cited in Epstein, Nordness, Nelson, & Hertzog, 2002). Therefore, their strengths may affect their classroom behavior and academic performance. For these reasons, a push towards strength-based assessment and intervention may be beneficial for the education system (Corcoran, 1998; O'Neal, 1997).

Before going into too much detail about strength-based assessment and the personal strengths that are important for academic success, it is important to have an

understanding of the population that will be addressed in the current study. It is also important to understand the rationale for selecting classroom behavior and academic performance as focal points.

The current project is focused on young students. We have defined this group of individuals as children in their early school years (grades one and two). One reason for choosing this target population is that we believe younger students are less influenced by extraneous variables. That is, as children get older it may be more difficult to examine how strengths are related to performance and behavior since these variables may also be affected by many other influences during adolescent years than young children are typically exposed to. It was also appropriate to choose a young target population to parallel the movement of early identification and intervention that seems to be adopted in most educational systems (Guralnick, 2005; Cowling et al., 2005).

Academic performance and classroom behavior were selected as variables in the current study because these variables have been shown to have lasting effects in an individual's life. Research shows that when a child experiences poor academic performance these early failures can have profound effects on subsequent performance and overall life success (Au, 1995). Behavioral problems have similar effects as demonstrated with the finding that approximately 55% of individuals with behavioral problems dropout of school (Fulk, Brigham, & Lohman, 1998). Other studies have shown that children who display severe aggressive and antisocial behaviors are at an increased risk for future negative outcomes, and are more likely to be involved in illegal activities (Trout et al., 2003). Because of the long-term implications of these difficulties, it may be important to research if fostering strengths in young children can improve success in

these areas. Another reason to explore academic performance and classroom behavior is because problems in these areas are fairly common within elementary classes. It is often the case that a teacher will have several children in their classroom with serious problems in these areas; therefore, integrating the use of strengths in the classroom, to improve performance and behavior, may be extremely beneficial.

Though psychologists are becoming more interested in the study of individuals' strengths and see the potential for strengths to be the basis of interventions, the empirical definition and measurement of such strengths was imprecise until recently. The initial difficulty in assessing strengths can be attributed to the fact that there were no available standardized tools. As a result of a change in theoretical approaches, and the progression of a less pathological way of thinking, psychologists were in need of assessment and intervention techniques that reflected these changes. In short, the growth of positive psychology was a catalyst for the development of new assessment tools, which are now known as strength-based assessment measures.

Strength-based assessment

Initial attempts to evaluate strengths basically consisted of general assessments of whether or not an individual was free of psychopathologies (Tiet et al., 1998; Conrad & Hammen, 1993). This approach implied that children with psychopathologies could not have social, behavioral, or emotional strengths since strengths and weaknesses were viewed as opposite ends of a single continuum. These early theories about strengths have since been discredited, and researchers now acknowledge that strengths and impairment are separate, although related, constructs (Walrath et al., 2004).

As the concept of strength-based assessment and treatment became clearer, individuals involved in providing services to children frequently used informal techniques to assess strengths. This process involved engaging in a "strength chat" with the child and other important individuals in the child's life (Epstein, Harniss, et al., 2003). There were no defined techniques to assess these aspects of the child's life, and therefore the methods used by different professionals varied (Epstein, Dakan, Oswald, & Yoe, 2001). In light of the increasing desire to follow the positive psychology framework, and the desire to use more scientific techniques, formal strength-based measures have been developed (Epstein, 2004; Rawana et al., 2000).

One prominently accepted definition of formal strength-based assessment proposed by Epstein & Sharma is:

> The measurement of those emotional and behavioral skills, competencies, and characteristics that create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers, and adults; enhance one's ability to deal with adversity and stress; and promote one's personal, social, and academic development (p.3)

This definition underlies a strength-based theory that aims to achieve a holistic view of the child and family, and compliments deficit-based approaches. It provides professionals and parents with information about areas of the child's life that are going well, and may empower the family and the child. Epstein proposes that the strengths-based approach can be based on four main beliefs: 1) all children have strengths; 2) focusing on children's strengths may result in enhanced motivation and improved performance; 3) failure to demonstrate a strength in a particular area does not imply a deficit on the part of the child, rather it is indicative of lack of opportunity to learn the

skill; and 4) service plans that begin with a focus on strengths are more likely to actively involve families and children in treatment (Epstein & Sharma, 1998).

From the strength-based model and the aforementioned core beliefs, Epstein and Sharma (1998) developed a formal assessment measure known as the Behavioral and Emotional Rating Scale (BERS), which is currently in it's second edition. The BERS was created to provide a standardized, reliable, and valid instrument to measure strengths of children (Epstein & Sharma, 1998). The final product was a 52-item rationally developed scale that is easy to complete and efficient to use. It assesses strengths in five domains including interpersonal strengths, family involvement, intrapersonal strength, school functioning, and affective strengths. The Interpersonal Strength (IS) scale measures a child's ability to control his or her emotions and behaviors in social situations. The Family Involvement (FI) scale measures a child's participation in and relationship with his or her family. The Intrapersonal Strength (IaS) scale measures a child's outlook on his or her competence and accomplishments. The School Functioning (SF) scale measures the child's competence in school and classroom tasks. The Affective Strength (AF) scale assesses a child's ability to accept affection from others and express their feelings (Epstein, 2004). The BERS 2 now consists of three parallel versions of the strength-based questionnaire, which includes a youth self report version, a parent version, and a teacher version (Teacher Rating Scale, TRS, which will be used in the current study).

Scoring and interpretation of the BERS provides several types of scores, the most basic of which is the raw score. This number is the sum of the ratings for the items in each subscale (Epstein, 2004). These numbers can then be converted into percentiles, subscale standard scores, or the BERS strength quotient that is a composite of all

subscale scores. The type of score that is needed will depend on the question that the researcher or professional needs to answer. Additionally, the interpreter is also able to choose between two norm groups. One group is a national sample of children from the United States who have not been identified as having emotional or behavioral disorders (NEBD). The other group is comprised of children who have been identified with an emotional or behavioral disorder (EBD).

Since strength-based assessment is relatively new, the assessment tools available are limited in number and their psychometric properties are not well established (Walrath et al., 2004); however, the BERS 2 is one of the most well developed thus far, showing good reliability and validity (Epstein, 2004). Based on research conducted to date, it is believed that the BERS, and subsequently the BERS 2, may be beneficial to professionals who develop treatment plans, interventions, and it may help them to monitor changes in strength areas (Epstein & Sharma, 1998). While both Epstein's conceptualization of the strength-based approach and his assessment instrument are both fairly well accepted, there are other approaches and assessment tools to consider.

Rawana, Cryderman, and Thompson (2000) conceptualized strength-based assessment in a slightly different manner. These authors refer to it as "the measurement of those cognitive, emotional, and behavioral skills, competencies, and characteristics that are valued both by the individual and the community, and reflect the individual's positive connection to the community's values and belief system". In accordance with their theoretical model, Rawana et al. (2000) have also developed a strength-based assessment measure, which is known as the Strength Assessment Inventory (SAI).

The impetus for the SAI was the Ministry Risk/Need Assessment Form (MRNAF), which explored potential risk and protective factors in relation to criminal activity and adjustment within a group of delinquent youths (Hoge, Andrews, & Leschied, 1996). The risk variables assessed included family relationship problems, family structuring problems, and parent problems. The protective factors measured included positive peer relations, school achievement, positive response to authority, and effective use of leisure time. Results of studies conducted using this tool, showed that the presence of risk factors was associated with heightened rates of re-offending and low levels of adjustment. In addition, and most relevant to strength-based research, the presence of protective factors was associated with more positive outcomes (Hoge et al., 1996). Research has been conducted which suggests that the MRNAF had good predictive validity (across sexes and ethnicities) and more specifically, that the MRNAF can be used to predict with fair accuracy which young offenders will re-offend (Jung & Rawana, 1999). This line of research raised the question of whether or not strengths could be used to predict success in many different facets of life, just as risk factors can predict poor outcomes.

Rawana et al. (2000) saw the potential for the Risk/Need Form to be the basis of a strengths assessment for children and adolescents both within and outside of the legal system. To accomplish this feat, the MRNAF was significantly modified to measure strengths that could act as protective factors against negative outcomes. Rawana et al. (2000) further modified the Risk/Need form to be relevant to school aged children because there was an obvious need for strength-based assessment measures in schools and mental health centers. Rawana, Brownlee, and Hewitt (2006) have significantly

modified the SAI during the last several years, and now the SAI is a strength-based instrument that is beginning to be used in both clinical practice and research.

While there is some overlap between the SAI and the BERS, the SAI covers several topics that are unique. For example, the SAI assesses the child's positive connections to the community, the quality of teacher and peer relations, and the leisure activities that may be considered strengths. Like the BERS 2, parents, teachers, and children may complete the SAI to provide researchers with a comprehensive fund of information. Because the inventory can be used to collect information from multiple sources and across multiple sites, it may be particularly useful. If the information gathered from the various informants (i.e., teachers, parents, and child) is relatively consistent, the strengths that are identified by all parties can be considered to be pervasive strengths and may be most likely to help the child prosper in other areas. If there are large discrepancies between the reports of the parents, teacher, and child, this may indicate that communication or interactions between the child and other rater may be disordered or distressed.

Since this instrument is very new, there are few psychometric properties to report; however, there is some evidence to suggest that the instrument has good construct validity. More specifically, teacher and parent reports on an earlier version of the SAI were found to be moderately correlated with reports from the same informants on the BERS. Pearson product-moment correlations were .643 and .822 for parents and teachers respectively (Welsh, 2003).

While strength-based assessment techniques have been used to study recidivism, this approach has also been used in various other settings and with various populations.

One study has explored strengths of children and adolescents in a residential setting (Lyons, Uziel-Miller, Reyes, & Sokol, 2000). Results of this study showed that strengths ratings, as measured by the Child and Adolescent Strengths Assessment (CASA), predict the level of success in reducing the child's risk behaviors during their stay in a residential setting. More recently, researchers have explored the relationship between strengths, as measured by the BERS, and functional impairment in a sample of children referred for community-based mental health services (Walrath et al., 2004). This study showed that youth with higher levels of functional impairment exhibited lower overall strengths. Furthermore, results from this study indicate that on average, males in this sample had higher overall strength ratings than females. From a treatment perspective, Yip (2003) has published a case illustration which outlines how the strength based perspective has been used to help an adolescent who has multiple diagnoses and is receiving mental health services for both addiction and mental illness. This article demonstrates that through focusing on strengths, an adolescent was able to re-build self-confidence and re-establish a healthy support system. In addition to the aforementioned articles outlining the utility of the strengths approach, research has also been published which outlines the study of strengths in adolescents who abuse drugs (Cosden, Panteleakos, Gutierrez, Barazani, & Gottheil, 2004), individuals with severe mental illnesses (Lehner, 2004), and the elderly (Kivnick, & Murray, 2001). While all these studies assume that there is a relationship between strengths and positive outcomes, the current study will explore this relationship in terms of academic success.

The current study is similar to these other studies in that it will also measure strengths and examine how these strengths are related to positive outcomes, which in this

case is academic success. While it is often assumed that there is a relationship between academic performance, classroom behavior, and strengths, the current study will explicitly study this relationship. The current study is unique when compared to these previously mentioned studies because it will focus on a normal school population versus a clinical or delinquent population. This is an important feature because the results of the current study may be useful to a very large population, versus applying only to a very specific, small group. Given that the current study is focused on examining strengths in the area of school psychology, it is important to outline the areas of strengths that have been shown to influence academic success. Some general sources of strengths include personal strengths, family strengths, and school strengths.

Strengths

Personal strengths are those which individuals themselves possess. For example, some children exhibit work related skills that include listening, following directions, staying on task, and organizing work materials. Children who are most likely to exhibit these strengths are those who are independent, responsible, self-regulated, and cooperative (Cooper & Farran, 1991). Children who do not display these behaviors, typically spend more time unengaged in classroom activities, have difficulties with rules and the teacher, and score lower on a standardized cognitive achievement measures (McClelland, Morrison, & Holmes, 2000).

It has also been shown that social skills or strengths can be an asset for students. Research shows that there is a relationship between student's social competence, relationships with teachers, academic engagement, and academic achievement in elementary school (Valeski, 2000). More specifically, social competence is predictive of

positive relationships with teachers, these positive relationships are predictive of increased levels of academic engagement, and increased engagement is predictive of academic success. These findings suggest that it is important to foster positive social skills to promote academic achievement (Valeski, 2000). Children who are socially competent or have good interpersonal skills are more likely to interact positively with peers, cooperate with other children, share, and respect others. On the other hand, children who lack social skills are often rejected by their peers, and consequences of this rejection may include aggressiveness, behavior problems, and academic failure (McClelland, Morrison, & Holmes, 2000).

Skills and orientations that are considered to be personal strengths are assessed in the BERS through a number of different domains. These domains include Intrapersonal Strength and Interpersonal Strength. Similarly, the SAI also assesses personal strengths through information gathered in several domains, such as Personality and Peer Functioning.

The second strengths area relevant to academic success are family strengths. These are defined as a set of relationships and processes that support and protect families and family members during times of adversity and change (Marsh, 2003). Some family strengths include good relationships between siblings, and supportive parent-child relationships. These close bonds and secure/healthy relationships within the family may act as protective factors against many negative outcomes. The children who grow up in such positive environments are more likely to be socially and academically competent and equipped to deal with challenges (Walker & Lee, 1998). Several additional family variables that are related to positive child outcomes include positive parental mental

health, household routines, shared parent-child activities, positive communication, and parental supervision and involvement (Marsh, 2003). All these variables contribute to the family's strengths and are reflected onto the children. Families with many strengths are typically characterized by high levels of closeness, concern, and interaction (Marsh, 2003).

As with personal strengths, family strengths can be formally assessed using the BERS and the SAI. On the BERS, strengths relating to aspects of family life are measured through the Family Involvement domain. On the SAI, family strengths are measured through the Family/Home functioning domain.

Throughout school strength literature, one of the most frequently referred to variables is school climate. School climate is a "stable set of organizational characteristics that capture the distinctive tone or atmosphere of a school" (Sweetland & Hoy, 2000, pg. 705). In essence, it is the personality of the school. The climate of each organization is unique and each one influences the behaviors of its members in different ways (Sweetland & Hoy, 2000). Two climates which are found to be particularly beneficial include open and healthy climates. Open climates are those in which the principal and teachers are genuine in their actions. Both teachers and the principal easily engage in acts of leadership and neither is preoccupied with task achievement or satisfaction of social needs (Sweetland & Hoy, 2000). On the contrary, in a closed environment the principal and teachers are described as merely "going through the motions" and both parties are seen as being inauthentic.

A healthy school climate is one in which all parties experience positive interrelationships, have high expectations for one another, and believe in themselves

(Sweetland & Hoy, 2000). Students who attend these schools tend to strive for academic excellence, work hard, and respect others who do well. Organizational health variables such as teacher affiliation, resource support, academic emphasis, and institutional integrity are related to student achievement or academic performance (Hoy & Hannum, 1997). Unhealthy climates are typically described as having vicious and counterproductive conflict and turmoil (Sweetland & Hoy, 2000). Typically no one enjoys being in such an environment, teachers see children as unruly and out of control, and students tend not to try very hard to succeed at academic endeavors.

A strong educational environment may also be considered a strength. These environments are characterized by supportive principal leadership focused on both school improvement and instructional excellence (Heck, 2000). In addition, this environment is a result of teachers who create classroom environments highly focused on academics, and who spend more class time for instruction, provide extra help, keep students on task and have higher expectations of their students. Research has shown that students who attend schools with strong educational environments have higher levels of accomplishment and improvement than expected (Heck, 2000).

While research shows that school characteristics can have a positive effect on accomplishment and improvement, the school's context may additionally promote or hinder these positive outcomes. Some contextual variables that may interfere with positive outcomes include school size, low community SES, and the percentage of special education students (Heck, 2000). School size has been the subject of many studies and researchers have generally found that smaller schools are more likely to have a positive school climate, higher parental and student involvement, a more collaborative

professional community, and shared goals with the community (Leonard, Leonard, & Sackney, 2001). Research has also shown however, that these characteristics of smaller schools can also be achieved in larger institutions, and these characteristics do not necessarily correspond to higher levels of academic performance (Leonard, Leonard, & Sackney, 2001).

While neither the BERS nor the SAI directly assess strengths of the school environment or climate, these strengths are captured in an indirect way. Largely these strengths are assessed in the SAI's School Functioning domain, which measures students' positive connections to their schools. It is assumed that the number of positive connections between a student and their school would be affected by the school's climate and environment. For example, if a school had a poor climate, students would likely have fewer strengths in the area of school functioning.

Personal, family, and school strengths all play an important role in the functioning of a student and may have a dramatic effect on the outcome of that person. The strengths presented thus far are only a small sample of the possible strengths that can assist a child in being successful academically. While there are other areas which contribute to academic success, those reviewed are deemed to be the most important in the literature to date.

Much of the research discussed up to this point, and the current study, focuses on studying strengths from a very observable and objective point of view. However, in the past, much research that related strengths to success focused on specific internal or psychological states. Some of the most researched positive states include self-concept, self-esteem, self-efficacy, and motivation. Although these specific internal/psychological

variables will not be assessed directly in this study, these strengths are assessed generally through use of the BERS and the SAI. More specifically, an individual who has many strengths, as measured by the BERS 2 or SAI, will likely have positive self-esteem, a healthy self-concept, and a high sense of self-efficacy. For this reason, it is important to briefly discuss past research which illustrates how these internal states can influence life outcomes, which in turn illustrates the importance of studying strengths.

Internal/Psychological Strengths

Self-concept is defined as a person's perception of him- or herself (Manger & Eikeland, 1998), that is formed by the person's beliefs about 1) their abilities, 2) environmental facilitation, 3) control or locus of control, and 4) the importance of certain goals (Gordon, 1996). The individual's beliefs in these areas, and subsequently the persons self-concept, can be influenced by close significant others, life experiences, as well as personal characteristics or strengths such as intelligence (Learner & Kruger, 1997). Some researchers have proposed that a student's self-concept is closely tied to their academic achievement in that it is a moderator and perhaps even the cause of such success (Manger & Eikeland, 1998). However, it has been suggested that differences in performance, as a result of self-concept may only be evident after approximately grade six.

The second potential internal strength to discuss is self-esteem. Self-esteem is the degree to which one values oneself. This feeling about oneself may be judged on a continuum ranging from very high to very low. Children with high self-esteem tend to view themselves in a favorable light, successfully manage tasks and responsibilities, display appropriate behaviors in social settings, and act responsibly towards others

(Larkin & Thyer, 1999). On the other hand, low self-esteem has been identified as one of the primary causes of behavioral problems in school aged children and can be a source of disruptive behaviors both at home and at school. These children view themselves negatively, display poor impulse control, are unsuccessful in behaving responsibly, and may be easily misled by others (Larkin & Thyer, 1999).

The third potential source of internal strength is self-efficacy. Self-efficacy is defined as an individual's beliefs about their performance capabilities in a particular context or specific task (Linnenbrink & Pintrich, 2002). It is necessary to be concerned with measures of self-efficacy in addition to those of self-concept and self-esteem because where self-concept and esteem are general affective evaluations of the self, self-efficacy is considered to be more situation specific and based on actual past accomplishments and success and failures (Linnenbrink & Pintrich, 2002).

The influence of self-efficacy on behaviors, academic performance, and strength development is not totally understood, however, past research with elementary and secondary students has shown that these variables are connected. Students who have higher levels of self-efficacy are more likely to show positive school behaviors such as the drive to work harder and therefore achieve higher levels of future success. These students are also more likely to attempt difficult tasks and enroll in more challenging classes at school (Linnenbrink & Pintrich, 2002). In essence, self-efficacy can influence both initiating behaviors and the degree of persistence exercised in overcoming challenging tasks (Bandura, 1997, as cited in Lane, Lane, & Kyprianou, 2004).

Research also shows a positive link between self-efficacy and performance, such that positive self-efficacy is associated with higher levels of achievement and learning, as

well as positive academic outcomes (Linnenbrink & Pintrich, 2002). In fact, a high perception of one's efficacy can lead to very strong performance accomplishments in the long run (Bouffard, Boileau, & Vezeau, 2001).

As outlined, self-concept, self-esteem, and self-efficacy are all significant influences on success. While some possible connections between these psychological states and successful life outcomes have just been discussed, it is also possible that all these psychological states are ultimately important because they affect the level of a student's motivation.

Motivation

Academic motivation is defined as an individual's determination to succeed in academic studies. Motivation is important because researchers have shown that individuals who have high levels of academic motivation typically have favorable attitudes towards school, high aspirations for a scholarly future, and good study habits (De & Singh, 1970). It is becoming more and more recognized that students need both cognitive skills and a motivational will to succeed in academics (Linnenbrink & Pintrich, 2002). It is likely that a persons strengths, as measured by the BERS 2 and SAI, effects the persons motivation, such that if one feels they have many positive qualities and abilities, they are likely to be more motivated to attempt different tasks and activities. In short, strengths influence motivation. This is evidenced in the fact that strengths related to family environment, parenting, and attachment can influence a child's level of academic motivation. More specifically, aspects of the home environment such as home adjustment seem practically essential to the development of academic motivation (De & Singh, 1970). Indicators of good home adjustment include a harmonious relationship

between the parental figures in a family unit, as well as between the parents and the children. This type of environment promotes the importance of education by providing the child with many stimulating experiences and by allowing the child to have an appropriate sense of independence and autonomy (De & Singh, 1970).

In addition, a child's perceptions of their parents can influence their development of academic motivation in many different ways. Boys who view their parents as being low in hostile psychological control, acceptant, and firm in their discipline, had higher academic achievement related traits (Vazquez Nuttall & Nuttall, 1976). In girls similar relationships were found except that firm or lax discipline had no correlation with achievement traits (Vazquez Nuttall & Nuttall, 1976).

Researchers have also looked at the relationship between attachment and academic motivation. Research on attachment theory indicates that the quality of early childhood attachment to primary caregivers is predictive of later adjustment (Arend, Gove & Sroufe, 1979, as cited in Learner & Kruger, 1997). Infants who are securely attached are more likely to be less aggressive, more cooperative, sympathetic, and competent in play when they are older (Ainsworth, 1983, as cited in Learner & Kruger, 1997).

While we currently have some information regarding specific internal/ psychological strengths, and the current study will add to the research that explores strengths more generally, historically there has been less emphasis placed on these areas of research. In the past, the focus of research has been on risk factors. Researchers now know that while risk factors are important, strengths are equally as important. Academic performance and classroom behavior cannot be accurately predicted by simply examining

the risk factors in the child's life. It is essential to explore the resources a child has that may act as preventive factors. It is now presumed that both risk factors and strengths are channeled through psychological pathways and affect the child's performance and behavior in the classroom through means such as self-esteem, self-concept, and self-efficacy. Understanding that both strengths and risk factors effect a child's development helps psychologists explain why some children who are faced with extreme adversity overcome these circumstances and succeed in life. Until the importance of strengths was acknowledged, there was no way for psychologists to attempt to explain this phenomenon of resiliency. So while strengths contribute to resiliency, it should also be said that when looking at strengths more generally, being resilient is in itself a strength.

Resiliency

Resiliency is essentially an ability to thrive and mature either in adverse circumstances or when faced with obstacles (Gordon, 1996). Some individuals face obstacles that are severe and infrequent, while others face those that are chronic and consistent. Regardless of the type of challenge, resilient individuals call on their personal and environmental resources to conquer problems encountered through daily living.

Many psychological factors assist in the development of resiliency, and some of those factors are the same factors that are recognized as internal/psychological strengths. For example, self-concept was described as an internal strength, and research has shown that individuals with a healthy self-concept are more likely to be resilient than others (Gordon, 1996). The explanation of this relationship is as follows; resilient students have a healthy self-concept (i.e., they believe in their own abilities), and their beliefs in themselves keeps them motivated and allows them to deal with obstacles that they may

face. Non-resilient youth on the other hand do not have the same secure beliefs in themselves and therefore are at risk in times of turmoil or stress (Gordon, 1996).

Resilient individuals often have many advantages or positive outcomes in comparison to non-resilient individuals. Resilient children are often friendly, conscientious, responsible, less likely to participate in deviant acts, and less likely to require mental health services (Gordon, 1996). In academic settings, resilient students typically show cognitive superiority and academic success, perhaps as a result of appropriate academic behaviors such as spending time on homework and cooperating with teachers in the classroom. Resilient individuals are also more androgynous than others. That is, resilient males and females are less likely to conform to stereotypical sex roles. In essence, there are five relatively stable personal factors that affect a person's level of resiliency. These factors are intelligence, androgyny, autonomy or independence, social skills, and internal locus of control (Gordon, 1996).

In summary, the research presented thus far illustrates how objectively measured strengths, more subjective psychological strengths, and motivation and resiliency are all important factors to consider when trying to predict how successful a child will be in an academic setting. The current study aims to add to the research outlining the importance of understanding a child's strengths through exploring the relationship between observable strengths, academic performance, and classroom behavior.

The Current Study

Based on the literature reviewed thus far, several hypotheses have been generated in regards to the current study:

1) All students will have some strengths in each domain measured by the TRS and the SAI.
2) Strengths will be positive correlated with academic performance. More specifically, higher strengths ratings will be associated with higher math, reading, and writing scores.
3) Strengths will be negatively correlated with poor classroom behavior, such that higher strengths ratings will be associated with lower level s of behavioral problems.
4) Total strength scores on the BERS 2 will be positively correlated with total scores on the SAI. In addition, scales that have similar content areas will be more highly correlated than those scales that assess strengths from different content areas. For example, school functioning scales from both the SAI and BERS will be more highly correlated than any other domains. In addition, similar results should be found for the interpersonal and peer functioning scales, as well as intrapersonal and personality functioning domains.

Method

Participants

For the current study we sought the permission and support of the Lakehead Public School Board so that we could present our research proposal to several school principals in the Thunder Bay region. Three principals were able to support the research and they then presented the research proposal to the first and second grade teachers at their schools. Eight teachers agreed to participate and take the time to complete several questionnaires on each of the consenting students in their class, up to a maximum of 10

students per class. Unfortunately, in one case, questionnaires were completed incorrectly and therefore were not included in the final sample. The final sample included 54 students (28 females, and 26 males) with an average age of 6.67 years (standard deviation = .727). Though we are ultimately interested in the characteristics of the students, they were not direct participants in this study.

Materials

Assessment measures for the current study.

As previously mentioned, the current study will add to the field of strength-based research in its attempt to assess strengths in a young student population. In the current study, strengths will be assessed using the previously outlined strength-based measures: the TRS (from the BERS 2; Appendix A) and a modified version of the SAI (Appendix B). The modified version of the SAI will only contain questions from the domains that a teacher would likely be very familiar with. The sections that will not be included are family/home functioning, employment, community involvement, spiritual and cultural identity, and current and future goals. It is unlikely either that the child's teacher will have enough information to complete questions within these domains accurately or that the domains are applicable to young children. Both the BERS and the modified SAI will provide information regarding the students' strengths in many areas, such as peer, school, and personality functioning.

Both strength measures were scored following the rules outlined in the BERS 2 manual (Epstein, 2004). More specifically, if more than two items were omitted on any subscale, that subscale was deemed to be invalid. In addition, if two or less items were missing, the average of the other items on the subscale were added either once or twice.

Since there are no formal scoring procedures for the SAI, the BERS 2 scoring rules were implemented. In addition, to account for "Does Not Apply" responses on the SAI, this questionnaire was scored by using a proportion of total possible points. For every "Does Not Apply" response (up to two) a total of three points were subtracted from the total possible number of points. Once each student's points were tallied, their attained number of strengths was divided by their total possible number of points.

Classroom behavior was formally assessed using a modified version of the Teacher Report Form (TRF; Appendix C) of the Achenbach System of Empirically Based Assessment (ASEBA, Achenbach & Rescorla, 2001). The complete version of the form is particularly well suited for studying classroom behaviors and some strengths; however, the modified TRF used in the current study consisted only of the questions regarding the child's classroom behavior. The unmodified TRF, and other Achenbach forms, assess both adaptive and maladaptive functioning, including competencies, and problems in children from ages 6 to 18 years. The entire collection consists of The Child Behavior Checklist to be completed by the parents, the Youth Self-Report form for children ages 11 to 18 years, and the Teacher's Report Form (TRF). By having three versions of the checklist information gathered from the child can be compared with teacher and parent reports. Each version of the form contains several open-ended questions as well as a 112-item checklist enquiring about the child's activities, relationships, and academic performance. Teachers completing the TRF are to answer the questions based on a 2-month period (Achenbach, & Rescorla, 2001), which will have implications for the methodology of the current study.

The ASEBA forms, and TRF in particular, is economical, easy to use, and has excellent psychometric properties. The TRF has average test-retest correlations of .90 (Achenbach, & Rescorla, 2001). The internal consistency of the TRF was illustrated using alpha coefficients, which ranged from .73 to .94. The content validity of many of the items on the ASEBA forms is supported by four decades of research using the instrument showing that the items discriminate significantly between referred and non-referred children. The criterion-related validity has been supported by multiple regressions, odds ratios, and discriminant analyses, which again have all shown significant differences between referred and non-referred children. The construct validity of the instrument has also been studied extensively and is supported by the fact that the ASEBA forms have similar scales as those contained on other instruments and with DSM criteria, by cross-cultural replications, and by predictions of long-term outcomes (Achenbach, & Rescorla, 2001).

In addition to the strengths and behavior data collected form the teachers, principals provided researchers with the performance data. The academic performance data included each student's most recent marks in math, reading, and writing.

General materials.

Each participating teacher was given enough data collection packages to complete one for every child in their class who returned a consent form signed by the their parent or guardian. Each package contains a booklet of questionnaires, which includes a copy of the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1998), a modified version of the Strengths Assessment Inventory (SAI; Rawana et al., 2006), and a

modified version of the Teacher Report Form (TRF) from the Achenbach System of Empirically Based Assessment (Achenbach & Rescorla, 2001).

Procedure

After ethical clearance was obtained from both Lakehead University and the Lakehead Public School Board, teachers of grade 1 and 2 students were asked to participate. Those who agreed to assist in the data collection were given a cover letter (Appendix D) and a consent form (Appendix E) to complete and also given cover letters (Appendix F) and consent forms (Appendix G) to send home with the students in their class in order to obtain parent consent. The teachers were then given data collection packages so that they could complete a package for each child that returned a signed consent form. Since the BERS and the SAI were completed by the students' teachers, it must be acknowledged that the collected data represents the students' strengths as they are perceived by their teacher. The teacher's perception of the students' strengths, especially internal psychological strengths, may be very different than the responses that would have been obtained from the child directly. Nevertheless, because the age group being targeted is so young, teacher reports of the students' strengths was the only acceptable source of this information.

Teachers were asked to notify the researchers once they completed their booklets, at which time the researchers collected the materials from them. All data was subsequently analyzed using SPSS 11.0 for Windows. During the analyses we were looking for relationships between performance, behavior, and strengths.

Results

Prior to conducting data analysis to test the hypotheses, the data was explored to determine whether or not it would be appropriate to consider the 54 students (28 females, and 26 males) as one sample, or if it would be more appropriate to consider males and females separately. An independent samples t-test showed that there was a significant difference between male (M=116.25, SD=18.87) and female scores (M=124.00, SD=12.17) on the TRS, $t(40)=-1.596$, $p<.01$, and therefore the original sample of 54 was split based on gender. Also worth noting is that there were no significant differences in the average behavior ratings of males (M=49.69, SD=9.04) and females (M=44.29, SD=7.46), $t(52)=2.305$, $p>.05$, and there were no significant age differences between the two samples (Males M=6.85, SD=.784; Females M=6.5, SD=.638) , $t(52)=1.784$, $p>.05$. Furthermore, age did not influence strength ratings (i.e., there was no significant difference between the overall strength ratings of six year olds (M=121.18, SD=16.87) compared to the overall strength ratings of older children (M=119.35, SD=16.38)), $t(40)=.366$, $p>.05$. These results suggest that while the samples differ in gender, they do not differ by age or behavior rating. Due to these preliminary findings, results of all following analyses will be presented separately for males and females. In addition, as a result of small sample sizes, and subsequently low power, results relating to the hypotheses of the current study are presented for both males and females separately, as well as for the combined sample (i.e., all 54 students).

Hypothesis One

To examine whether or not all students have some strengths, descriptive statistics were used to explore the distribution of scores on the subscales of both the TRS and the

SAI. Results presented in Tables 1 and 2 support hypothesis one, and suggest that all students were identified as having some strengths in all domains.

In addition, descriptive statistics and missing value analysis showed that scaled scores were not available for 22.2% of students on the Family Involvement scale of the TRS (23.1% for males, and 21.4% for females), and 40.7% of students on the Leisure and Recreation subscale of the SAI (42.3% for males, and 39.3% for females). As a result of the clustering of missing values within these domains, these subscales were eliminated from further data analysis, except for cases where total strength scores were compared.

Hypothesis Two

With regards to hypothesis two, three canonical correlations were used to examine the relationship between strengths ratings and academic performance. As previously stated, it was hypothesized that strengths ratings would be positively correlated with math, reading, and writing scores, for both males and females.

To research this hypothesis, three canonical correlations were conducted between a set of strength variables and a set of academic performance variables. The strengths set included measures of interpersonal, intrapersonal, school functioning, and affective strengths. The academic performance set measured performance in math, reading, and writing.

Combined sample.

For the combined sample of males and females, one canonical root was significant, $\chi^2(12) = 47.388$, $p<.01$, and yielded a canonical correlation of .761 (57.9% overlapping variance). Using the recommended .3 as a cutoff (Tabachnick & Fidell, 2001), the root was characterized by a strong negative loading on intrapersonal strengths

(-.650), and school functioning (-.989), a moderate negative loading on interpersonal strengths (-.479) and affective strengths (-.383), and a strong negative loading on math (-.977), reading (-.845), and writing (-.829) skills. Within this canonical correlation, the two remaining correlations were not significant and therefore, the first canonical variate accounted for the significant relationship between the two sets of variables. These results suggest that having lower scores on the strength domains (excluding the family involvement subscale) is associated with lower academic scores.

It should be noted that the variables included in both sets were highly correlated amongst themselves (see Table 3 and Table 4), and also had high bivariate correlations with the variables in the opposite set (see Table 5). Tabachnick and Fidell (2001) suggest that one should be careful in interpreting canonical correlations whose variables within sets and between sets have high bivariate correlations (i.e., greater than .70). These high correlations, may suggest multicollinerity or singularity, which makes the solution unstable. Therefore caution should be taken when interpreting these findings.

As a result of the high bivariate correlations within the academic strengths set, composites were derived to yield an average academic performance mark. Results subsequently showed that average academic performance ($M=3.94$, $SD=.683$) and total strengths ($M=120.31$, $SD=16.01$) were significantly positively correlated, $r(42)= .496$, $p<.01$. This indicates that even if multicollinearity poses a problem in interpreting the canonical correlation, there is a significant positive correlation between strengths and performance.

Female sample.

For females, one canonical root was significant, $\chi^2(12) = 39.818$, $p<.001$, which yielded a canonical correlation of .845 (71.4% overlapping variance). Again, using .3 as a cutoff, the root was characterized by a strong negative loading on school functioning (-.995), a moderate negative loading on intrapersonal strengths (-.444), and a strong negative loading on math (-.958), reading (-.794), and writing (-.872) skills. This indicates that lower scores on school functioning and intrapersonal functioning are associated with lower performance scores in math, reading, and writing. Using the same procedure as describe above with the complete sample, the simple correlation between average academic performance (M=4.22, SD=.590) and strength quotients (M=124.00, SD=12.17) for the female sample was not significant, $r(22)= .236$, $p>.05$.

Male sample.

For males, one canonical root was significant, $\chi^2(12) = 22.036$, $p<.05$, which yielded a correlation of .717 (51.4% overlapping variance). The root was characterized by a strong negative loading on school functioning (-.885), a moderate negative loading on both intrapersonal strengths (-.596) and interpersonal strengths (-576), and a strong negative loading on math (-.917), reading (-.873), and writing (-.608) skills. This indicates that lower scores in three domains (school, intrapersonal, and interpersonal functioning) are associated with lower performance in all academic areas measured (i.e., math, reading, and writing). For the male sample, average academic performance (M=3.65, SD=.663) and total strength rating (M=116.25, SD=18.87) was significantly correlated, $r(20)= .583$, $p<.01$. It should be noted that while the simple correlation between performance and strengths was significant for males, and not for females, the

correlations for both samples (r=.583 and .236, respectively) were not significantly different (z=-1.28, p>.05).

Hypothesis Three

To examine hypothesis three (i.e., whether or not strengths and poor behaviors are negatively correlated, for both males and females), three canonical correlations were conducted. These canonical correlations were performed between the same set of strength variables as previously discussed, and a set of classroom behavior variables. The strengths set again included measures of interpersonal, intrapersonal, school functioning, and affective strengths, and the classroom behavior set included measures of both internalizing and externalizing behaviors.

Combined sample.

For the combined sample, two significant roots were identified. The first root, $\chi^2(8) = 38.151$, $p<.001$, yielded a canonical correlation of .663 (44% overlapping variance), and the second, $\chi^2(3)=10.078$, $p<.05$, yielded a correlation of .433 (18.7% overlapping variance). Therefore, both canonical variates contributed to the significant relationship between the two sets of variables. The first canonical variate was characterized by a strong positive loading on interpersonal strengths (.940), a moderate positive loading on intrapersonal strengths (.507), school functioning (.503), and affective strengths (.419), and a strong negative loading on externalizing problem behaviors (-.993). This indicates that higher strength ratings in all domains are associated with fewer externalizing behavioral problems.

The second canonical variate was characterized by a strong positive loading on intrapersonal strengths (.691) and school functioning (.831), a moderate positive loading

on affective strengths (.475), and a strong negative loading on internalizing problem behaviors (-.995). Taken together, these findings support this hypothesis and indicate that higher strength scores are associated with fewer externalizing and internalizing behavioral problems in the classroom. Interestingly, while all strength domain scores are associated with externalizing behaviors, interpersonal functioning did not contribute to the relationship between strengths and internalizing behavior.

Again, high correlations within the set of strength variables (as indicated in table 3) and between the strengths set and behavioral set (Table 6) indicate that the canonical correlations examining strengths and behaviors should be interpreted cautiously. As a result of the high bivariate correlations between variables, the simple correlation between the strength index (M=120.31, SD=16.01) and total behavior problems (M=46.89, SD=8.62) was calculated, and showed that the two variables were significantly negatively correlated, $r(42)=-.659$, $p<.001$.

Female sample.

For the female sample, one canonical root was significant, $\chi^2(8) = 24.436$, $p<.01$, yielding a canonical correlation of .787 (61.9% overlapping variance). The root was characterized by a strong negative loading on interpersonal strengths (-.817), a moderate negative loading on both school functioning (-.440) and intrapersonal strengths (-.438), and a strong positive loading on externalizing behaviors (.956). This indicates that higher strengths scores in intrapersonal, interpersonal, and school functioning are associated with fewer externalizing behaviors. However, the simple correlation between strengths (M=124.00, SD=12.17) and total behaviors (M=44.29, SD=7.46) for females was not significant, $r(22)=-.387$, $p<.05$.

Male sample.

For the male sample, one canonical root was significant, $\chi^2(8) = 18.767$, $p<.05$, yielding a canonical correlation of .723 (52.3% overlapping variance). The root was characterized by a strong positive loading on interpersonal strengths (.934) and affective strengths (.704), a moderate positive loading on intrapersonal strengths (.590) and school functioning (.578), a strong negative loading on externalizing behaviors (-1.0), and a relatively weak negative loading on internalizing behaviors (-.302). These results suggest that for the male sample, higher scores in all strength domains are associated with lower externalizing and internalizing behaviors. The simple correlation between strengths (M= 116.25, SD=18.87) and total behaviors (M=49.69, SD=9.04) for males was significant, $r(20)=-.771$, $p<.001$. While in this case the simple correlation for males was once again significant and that of females was not significant, both correlations (r=-.771 and -.387 respectively) were significantly different ($z=2.11$, $p<.05$).

Hypothesis Four

Pearson Product Moment correlations were calculated to test hypothesis four, (i.e., whether total strength scores on the BERS 2 are positively correlated with total scores on the SAI, and whether scales measuring similar content areas are more highly correlated than scales that assess strengths from different content areas).

Combined sample.

Results for the combined sample showed that strengths ratings on the BERS were highly positively correlated with strength ratings obtained on the SAI, $r(31)=.867$, $p<.001$. In addition, a correlation matrix showed that scales covering similar content areas on the BERS 2 and the SAI (i.e., school functioning on both, Intrapersonal strength

and Personality functioning, and Peer relations and Interpersonal strengths) were more highly correlated with each other than any other scales. However, these scales were not necessarily more correlated than the other scales on the same measure or the total score on either measure (see table 7).

Female sample.

The same analysis was conducted for the female and male samples separately. For females, total scores on the SAI and the BERS were also significantly positively correlated $r(17)=.856$, $p<.001$, however, scales measuring related content areas were not necessarily more correlated than other scales (see table 8).

Male sample.

A similar pattern was found in the male sample, where BERS totals and SAI totals were significantly positively correlated, $r(14)=.897$, $p<.001$, but again scales measuring similar content areas were not necessarily more correlated than theoretically unrelated scales (see table 9).

Summary of Main Analyses

Results from the main analyses of the current study illustrate that all students do have strengths and in fact, they have strengths in multiple domains. These strengths are related to both academic average and classroom behavior; however, the nature of the relationship may vary for males and females. In addition, results suggest that the SAI is another possible strength assessment tool that may be a viable alternative to the BERS.

Supplemental Analyses

As supplemental analyses, several multiple regressions were conducted, to determine which strength domains scores, on both the SAI and TRS, were the best

predictors of school success as measured by both academic performance and classroom behavior.

Predicting academic average using the TRS.

The first multiple regression (MR) was performed between academic average as the dependent variable and all TRS domain scores as independent variables.

The overall model for the combined sample was found to be significant, $F(5,41)=8.915$, $p<.001$, and this model accounted for 55.3% of the variance within the academic average variable. Furthermore, only one domain score was found to make a significant unique contribution (accounting for 35.2% of the variance), which was the school functioning domain. These findings suggest that of all the TRS domain scales, the school functioning domain is the best predictor of academic performance.

When conducting the multiple regression within the female population, the same pattern was found, that is, the overall model was significant, $F(5, 21)=7.794$, $p<.01$, and accounted for 70.9% of the variance in the academic average variable. Again, school functioning was the only unique predictor accounting for 68.1% of the variance.

For males, the overall model was not significant, $F(5, 19)=2.748$, $p>.05$. This means that the school functioning domain of the TRS can be used to predict academic success for girls, but not for boys.

Predicting academic average using the SAI.

Additionally, several multiple regressions were conducted that had academic average as the dependent variable, and all SAI domain scores as the independent variables. The overall model for the combined sample was found to be significant, $F(5,31)=9.896$, $p<.001$, and accounted for 65.6% of the variance within the academic

average variable. Again only one domain score made a significant unique contribution. This domain was again the school functioning domain, which explained 32.6% of the variance.

For females, the overall model was significant, $F(5, 16)=5.612$, $p<.01$, and accounted for 71.8% of the variance. As with the TRS, the school functioning domain was the only factor that made a unique contribution (explaining 56.7% of the variance). For males, the overall model was not significant, $F(5, 14)=1.526$, $p>.05$.

Predicting classroom behavior using the TRS.

Several multiple regressions were also conducted to explore what strength domain would be the best predictor of classroom behavior. The first analysis was conducted with the entire sample, and showed that the BERS subscales could be used to predictor classroom behavior, $F(5, 41)=9.721$. Within this model, both interpersonal strengths, and school functioning were significant predictors. For the female sample, the overall model was not significant; however, the overall model for the males was significant, $F(5,41)=9.721$, $p<.001$. Within the analysis for males, both interpersonal strengths and school functioning strengths were significant predictors. This indicates that the TRS can accurately predict academic performance for girls, however it cannot accurately predict classroom behavior. The opposite pattern is true for males, that is, the TRS is a significant predictor of classroom behavior for boys, but not for academic performance.

Predicting classroom behavior using the SAI.

Using the SAI and the combined sample, the overall model was significant, $F(5, 31)=6.316$, and explained 54.8% of the variance in behavior scores, however, no one subscale was a significant unique predictor. When examining the female and males

samples separately, the overall models were not significant. This indicates that the total strength score on the SAI is a significant predictor when considering the combined sample, however, when looking at the samples split by gender, the SAI cannot predict students scores on the TRF.

Discussion

In light of previous research, such as that by Walrath et al. (2004), which found gender differences in strengths ratings, gender differences were explored in the current study. The independent samples t-test showed that girls, on average had higher total strengths ratings than males. These findings suggest that it may be more appropriate to explore the relationships between strengths, academic performance, and classroom behavior separately for males and females as the relationships among these variables may differ by gender.

At this point it is also interesting to note that the gender differences found in the current sample, contradict the findings of Walrath et al. (2004) who found that males had higher strength ratings than females. However, it should also be noted that Walrath et al. (2004) were studying strengths in a sample of adolescents referred for community mental health services. The fact that males had higher strength ratings in that sample may speak to the fact that adolescent girls are less likely to be referred to mental health services unless the presenting problems are very serious and functioning is very impaired. This may suggest that at the time of treatment, adolescent females may have fewer strengths and resources to draw on.

Importantly, in the current study, the female and male samples were found to have no significant differences in age. This indicates that both samples were essentially the

same age, which rules out age as a confound variable. Similarly, there were no significant differences in behavioral ratings of males and females. These findings suggest that teachers rated males and females as having a similar number of behavioral problems in the classroom.

Once it was determined that results should be reported for both the combined sample and the sample split by gender, data analysis continued and the first hypothesis was tested and confirmed. This hypothesis stated that all students would have some strengths in all areas. Descriptive statistics showed that all teachers rated all students as having some strengths in all domains measured. This implies that even children with low performance scores, and poor behavior, have some resources in all measured domains. This supports Epstein's belief that all individuals have some strengths (Epstein & Sharma, 1998), and furthermore it suggests that most individuals have strengths in more than one domain. This information may be important for a number of reasons; however, probably most significantly, it suggests that it may be possible to use these strengths in various domains to improve a sense of self-efficacy and development of a healthy self-concept. More specifically, it is fairly common for children to have a positive view of themselves and their capabilities in some area of functioning, (e.g., a child recognizes they are good in academics) but still this child's sense of self-efficacy and healthy self-concept may be specific to one domain (e.g., the child doesn't believe they are good at anything else) (Gordon, 1996). Identifying and working with strengths in other domains of functioning (e.g., outside the school functioning domain), may improve the child's sense of self-efficacy, such that they no longer believe they are only good at one thing, but come to recognize that they have many strengths. By using or valuing these strengths

in the classroom, even if the strength is outside of the school functioning domain, a struggling student may develop an increased sense of accomplishment and a more positive view of themselves leading to more positive academic outcomes (Linnenbrink & Pintrich, 2002). In essence, any opportunity to focus on such strengths may be a positive experience for the student.

In addition to finding that all students in the sample have some strengths in all domains, it is not surprising that descriptive statistics and missing value analysis also showed that many teachers are not well informed about their students' strengths in all domains. More specifically, the teachers included in our sample did not have sufficient information to complete the questions from the TRS Family involvement scale, or the SAI Leisure and recreation scale. Analysis showed that a very large percentage of these scales had more than two items omitted, and therefore were considered invalid by the scoring rules followed in this project. It was initially thought that teachers would have difficulties answering the questions related to family, which was the reason that this scale of the SAI was omitted from the questionnaire. It is also logical to assume that teachers would know less about each student's leisure and recreational activities since strengths in this domain may not be readily expressed in the school setting. In contrast, in most cases, teachers seemed well informed about strengths in peer functioning, personality functioning, personal care, and school functioning, which is expected since strengths in these domains may be directly observed in the school settings. These findings suggest that it may be necessary for teachers to have discussions with their students regarding their strengths and functioning outside of the school setting if they wish to be well informed about a student's strengths in all areas of functioning. If teachers are informed

about strengths across areas, they will be better able to incorporate strengths from all domains into classroom activities in an effort to improve academic success. In addition, being well informed about strengths in other areas may allow teachers to have an accurate and complete picture of all their students' competencies and therefore they will have a more holistic view of each of their students (Walrath et al., 2004).

The second hypothesis examined in the current study proposed that strengths and performance would be positively correlated. More specifically, it was thought that low scores on the subscales of the BERS would be associated with low academic performance. In other words, students who were rated as having more strengths, would generally perform better in the classroom, and this hypothesis was confirmed. In the combined sample lower strengths scores on all domains (excluding family involvement) were associated with lower achievement marks in mark, reading, and writing. This finding suggests that strengths in all domains may have some influence on overall academic success, and lacking strengths across domains is likely to be associated with poor outcomes. These findings also suggest that it may be academically valuable to promote strength development in all domains. Even strengths in domains that are seemingly unrelated to school functioning may improve a child's performance and behavior in school. This finding is not unexpected since previous studies have also shown that strengths in a variety of domains are related to positive outcomes in other settings (Lyons et al., 2000).

Slightly different results were obtained from the canonical correlations performed with the split sample data. These results showed that the only significant strength domains associated with poor performance for females, were lower scores on school

functioning and intrapersonal strengths. Additionally, for boys, these same domains were significant, but interpersonal strengths were also found to be important. These findings suggest that fostering strengths within the school and intrapersonal domains are most likely to serve students well throughout their academic careers. In addition, this reinforces the idea that both parents and teachers should attempt to foster strengths in their children and students, especially in areas of school and intrapersonal functioning, and also interpersonal skills for boys. It is unclear why interpersonal strengths were found to be more important for males than females; however, this would be an interesting area to explore in future research studies.

Another series of canonical correlations were conducted to test hypothesis three which stated that strengths would be negatively correlated with poor classroom behavior, such that higher strengths ratings would be associated with lower levels of behavioral problems, for females and males. Results of the canonical correlation for the combined sample confirmed this hypothesis and showed that high strengths ratings on all scales were associated with low scores on externalizing problems, and in addition, high scores on intrapersonal, school, and affective functioning were associated with low levels of internalizing problems. The fact that interpersonal strengths do not have a significant loading on internalizing behaviors is an interesting finding; however, again there is no explanation for such findings in the literature to date.

For the female sample, negative strength ratings in interpersonal, school, and intrapersonal functioning were found to be associated with higher levels of externalizing behaviors. For the male sample, positive strength ratings in all domains were associated with a decreased number of externalizing and internalizing problems. It is interesting that

strengths are related to both internalizing and externalizing strengths for boys, and only to externalizing for girls, however, it is difficult to explain these findings in terms of past research because there has not been any similar research conducted. Again, future research must be conducted in this area to determine whether or not certain areas of strengths have different relationships with internalizing problems in comparisons to their relationship with externalizing problems.

Hypothesis four, which stated that total strength scores on the BERS 2 would be positively correlated with total scores on the SAI, and that scales having similar content areas would be more highly correlated than scales that assess strengths from different content areas, was partially supported. Results showed that for the complete sample, total scores on the TRS and the SAI were very highly correlated, as was found by Welsh (2003). This indicates that the SAI is indeed measuring strengths and therefore implies that the SAI may be a valid alternative to the TRS. Overlapping scales of the TRS and the SAI (e.g., interpersonal strength and peer relations), were found to be more highly correlated than unrelated scales. However, these scales were often more correlated with other scales from the same measure as oppose to the scale that overlapped in content.

When similar analyses were conducted for the data split by gender, total scores on the SAI and BERS were again found to be significantly correlated for both males and females. On the other hand, scales with overlapping content areas were not necessarily more correlated than scales measuring strengths from different domains. While these analyses were originally conducted to provide evidence for the overall content validity of the SAI, the sample sizes may cause particular problems when looking at the data from the analyses split on gender. In the future it is hoped that the SAI will be more readily

used and that there will be studies designed with the specific purpose of establishing the psychometric properties of the SAI.

Although the results of the current study did support the three proposed hypotheses, the current study has many limitations, in terms of how confidently we can generalize the findings to the general population. The first limitation, as previously mentioned, was the small sample size. Because there were eight participating teachers, it would have been possible to gather data for 80 students, however, not all classes had ten participating students. In fact, some classes had very low response rates; with as few as two students who had returned signed consent forms. In addition, because each package required about one hour of the teachers' time, it was not feasible to get every teacher within the Lakehead Public School Board to participate. Additionally, the canonical correlations conducted on the split data sets may not be appropriate because of the sample sizes. Conducting multivariate analysis with so few participants results in very low power and therefore, weak conclusions.

A second flaw is that teachers were the only informants used in the current study. In the future it may be useful to collect data regarding students' strengths from the parents as well. This information could be useful in determining how a teacher's perception of strengths may be biased as a result of a student's performance and behavior, and it will also make it possible to determine how teachers' ratings may subsequently differ from a parent's perspective. It may be the case that teachers are less able to recognize the strengths of students who behave and perform poorly in the classroom, or perhaps they are just less informed about these students. Although parent

ratings may also be biased, it would be informative to see the similarities and differences between the ratings of both informants.

A third limitation was found in the use of the SAI. The scoring of the SAI was difficult as a result of the "Does not apply" option. In addition, this option made the questionnaire somewhat confusing (i.e., it was clear that this option was misused in some cases). This limitation was overcome as the data obtained form the BERS could be used for the majority of data analysis, however, the forced choice options and the scoring of the SAI are issues that will need to be addressed before this instrument is broadly used in practice and research.

Regardless of the limitations of the current study, this project is a unique piece of research that illustrates the relationship between a student's strength, their academic performance, and classroom behavior, and implies that gender differences may be present. This validates previous beliefs that strengths are important, and strength-based approaches can be useful within a school setting, however, it suggests that how they should be implemented may vary across genders.

Much future research is needed in this area, and additionally, the supplementary analyses of this study suggest some other possible directions for such studies. Through exploring whether or not scores on the BERS or the SAI can accurately predict academic average, findings support the idea that strengths in the domain of school functioning may be the best predictor of higher academic performance in a combined sample. This was an expected finding since the school functioning domain in part measures one's level of academic achievement. Additionally, MR analyses results suggest that all SAI domains combined are able to account for more variance in academic average scores than scores

on all of the TRS domains combined. This may suggest that while the SAI Leisure and recreation scale was difficult of teachers to complete (based on number of omitted responses), the SAI as a whole is the best predictor of a student's academic performance. This may be a result of the fact that the version of the SAI administered in the current study had almost four times as many questions as the TRS of the BERS 2 system.

When conducting these MR analyses with only the female data set, both the SAI and the BERS were able to predict academic average, however, when conducting the same analyses with the male data, these strength assessment measures were not able to predict academic performance for males. This is an interesting finding that will need to be further explored in future research. Currently there is no theoretical basis for concluding that strengths cannot predict academic average for males.

When conducting multiple regression analyses to explore whether or not the SAI or BERS can predict classroom behavior, it was found that both interpersonal and school strengths can predict behavior for boys, however, no significant prediction can be made within the female sample. This is another finding that needs to be explored further in order to determine the theoretical reason for such differences. At this point, it is unclear why strength scores can predict behaviors for males, and not for females.

On a broader topic, more research is needed that explicitly studies the relationship between observable strengths and self-esteem, self-concept, and self-efficacy. While it was assumed in the current study that an individual's strengths directly influenced a person's psychological states, this relationship should be explored in more detail. Another area that needs to be explored is whether or not strengths are stable across the

life span, or if strengths ratings in certain domains increase during certain developmental stages.

Continued research in this area is important because of the practical implications of such knowledge. This research has the potential to change the focus in the classroom from one of deficits in reading, writing, and math to a more positive approach. This new approach should encourage children to use their strengths from all domains to help them succeed in the classroom. It is hoped that through recognizing and promoting strength development in the classroom, students will develop an improved sense of motivation, which can be the driving force urging students to continue to pursue academic success.

In addition, these results are not only important for educators, it is also important for parents to appreciate the importance of fostering strengths. More specifically, results from this study can show parents that strengths in a variety of settings can help children succeed. For this reason, parents should encourage their children to explore their likes and capabilities in many different activities and settings. It seems as though having strengths in any area may improve a child's general sense of self-esteem and therefore help them develop confidence and provide them with the motivation to succeed in school.

References

Achenbach, T.M., & Rescorla, L.A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.

Au, R.C.P. (1995). Academic failure and learned hopelessness in Hong Kong academically low achievers. *Bulletin of the Hong Kong Psychological Society, 34-35*, 83-100.

Bouffard, T., Boileau, L., & Vezeau, C. (2001). Students' transition from elementary to high school and changes of the relationship between motivation and academic performance. *European Journal of Psychology of Education, 16*(4), 589-604.

Conrad, M., & Hammen, C. (1993). Protective and resource factors in high and low risk children: A comparison of children with unipolar, bipolar, medically ill and normal mothers. *Development and Psychopathology, 5*, 593-607.

Cooper, D.H., & Farran, D.C. (1991). *The Cooper-Farran Behavioral Rating Scales.* Brandon, VT: Clinical Psychology Publishing Co., Inc.

Corcoran, J. (1998). Solution-focused practice with middle and high school at-risk youths. *Social Work in Education, 20*(4), 232-243.

Cosden, M., Panteleakos, F., Gutierrez, L., Barazani, S., & Gottheil, E. (2004). Strength-based assessment of adolescents who abuse drugs: Implications for helping high-risk youth. *California School Psychologist, 9*, 115-126.

Cowling, V., Costin, J., Davidson-Tuck, R., Esler, J., Chapman, A., & Niessen, J. (2005). Responding to disruptive behaviour in schools: Collaboration and capacity

building for early intervention. *Australian e-Journal for the Advancement of Mental Health, 4*(3), 1-8.

De, B., & Singh, R. (1970). Home adjustment as a determinant of academic motivation. *Indian Educational Review, 5*(2), 52-58.

Epstein, M.H. (2004). *Behavioral and Emotional Rating Scale: A Strength Based Approach to Assessment* (2nd edition). Austin, Texas: PRO-ED Inc.

Epstein, M.H., & Sharma, J.M. (1998). *Behavioral and Emotional Rating Scale: A Strength Based Approach to Assessment.* Austin, Texas: PRO-ED Inc.

Epstein, M.H., Dakan, E., Oswald, D.P., & Yoe, J.T. (2001). Using strengths-based data to evaluate children's mental health programs. In M. Hernandez & S. Hodges (Eds.), *Developing Outcomes Strategies in Children's Mental Health: Systems of Care for Children's Mental Health* (pg. 153-166). Baltimore, MD: Paul H. Brookes Publishing Co.

Epstein, M.H., Harniss, M.K., Robbins, V., Wheeler, L., Cyrulik, S., Kriz, M., & Nelson, J.R. (2003). Strength-based approaches to assessment in schools. In M.D. Weist, S.W. Evans, & N.A. Lever (Eds.), *Handbook of School Mental Health: Advancing Practice and Research* (pg 285-299). New York, NY: Kluwer Academic/Plenum Publishers.

Epstein, M.H., Nordness, P.D., Nelson, J.R., & Hertzog, M. (2002). Convergent validity of the Behavioral and Emotional Rating Scale with primary grade-level students. *Topics in Early Childhood Special Education, 22*(2), 114-121.

Fulk, B.M., Brigham, F.J., & Lohman, D.A. (1998). Motivation and self-regulation: A comparison of students with learning and behavioral problems. *Remedial and Special Education, 19*(5), 300-309.

Gordon, K.A. (1996). Resilient Hispanic youths' self-concept and motivational patterns. *Hispanic Journal of Behavioral Sciences, 18*(1), 63-73.

Guralnick, M. (2005). Early intervention for children with intellectual disabilities: Current knowledge and future prospects. *Journal of Applied Research in Intellectual Disabilities, 18*(4), 313-324.

Heck, R.H. (2000). Examining the impact of school quality on school outcomes and improvement: A value-added approach. *Educational Administration Quarterly, 36*(4), 513-552.

Hoge, R.D., Andrews, D.A., & Leschied, A.W. (1996). An investigation of risk and protective factors in a sample of youthful offenders. *Journal of Child Psychology and Psychiatry, 37*(4), 419-424.

Hoy, W.K., & Hannum, J.W. (1997). Middle school climate: An empirical assessment of Organizational Health and Student Achievement. *Educational Administration Quarterly, 33*(3), 290-311.

Jung, S., & Rawana, E.P. (1999). Risk and need assessment of juvenile offenders. *Criminal Justice and Behavior, 26*(1), 69-89.

Kivnick, H.Q., & Murray, S.V. (2001) Life strengths interview guide: Assessing elder client's strengths. *Journal of Gerontological Social Work, 34*(4), 7-31.

Lane, J., Lane, A.M., Kyprianou, A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality, 32*(3), 247-256.

Larkin, R., & Thyer, B.A. (1999). Evaluating cognitive-behavioral group counseling to improve elementary school students' self-esteem, self-control, and classroom behavior. *Behavioral Interventions, 14*(3), 147-161.

Learner, D.G., & Kruger, L.J. (1997). Attachment, self-concept, and academic motivation in high-school students. *American Journal of Orthopsychiatry, 67*(3), 485-492.

Lehner, R.K. (2004). The role of strengths in behavioral healthcare for individuals with severe mental illness. *Dissertation Abstracts International: Section B: The Sciences & Engineering, 65*(5-B), 2634.

Leonard, L., Leonard, P., & Sackney, L. (2001). Confronting assumptions about the benefits of small schools. *Educational Management & Administration, 29*(1), 79-96.

Linnenbrink, E.A., & Pintrich, P.R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*(3), 313-327.

Lopez, S.J. (2000). The emergence of positive psychology: The building of a field of dreams. *American Psychological Association of Graduate Students (APAGS) Newsletter, 12*(2).

Lyons, J.S., Uziel-Miller, N.D., Reyes, F. & Sokol, P.T. (2000). Strengths of children and adolescents in residential settings: Prevalence and associations with psychopathology and discharge placement. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(2), 176-181.

Manger, T. & Eikeland, O.J. (1998). The effect of mathematics self-concept on girls' and boys' mathematical achievement. *School Psychology International, 19*(1), 5-11.

Marsh, J.C. (2003). Arguments for family strengths research. *Social Work, 48*(2), 147-149.

McClelland, M.M., Morrison, F.J., & Holmes, D.L. (2000). Children at risk for early academic problems: The role of learning related social skills. *Early Childhood Research Quarterly, 15*(3), 307-329.

O'Neal, G.S. (1997). Focusing on strengths in a special education class: A primary prevention approach. *Social Work in Education, 19*(4), 279-285.

Rawana, E.P., Brownlee, K., & Hewitt, J. (2006). Strength Assessment Inventory (SAI) for children and adolescents. Unpublished manuscript, Lakehead University, Thunder Bay, Ontario.

Rawana, E., Cryderman, B., & Thompson, R. (2000). *Manual of probation barrier training*. Ministry of Community and Social Services, Province of Ontario.

Seifert, T.L. (2004). Understanding student motivation. *Educational Research, 46*(2), 137-149.

Shaw, M.F. (2004). Criminal and hospital recidivism of NGRI acquittees. *Dissertation Abstracts International: Section B: The sciences & Engineering, 65*(5-B), 2651.

Sweetland, S.R., & Hoy, W.K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly, 36*(5), 703-729.

Tiet, Q., Birs, H., Davies, M., hoven, C., Cohen, P., Jensen, P., et al. (1998). Adverse life events and resilience. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 1191-1200.

Trout, A.L., Ryan, J.B., La Vigne, S.P., & Epstein, M.H. (2003). Behavioral and Emotional Rating Scale: Two studies of convergent validity. *Journal of Child and Family Studies, 12*(4), 399-410.

Valeski, T.N. (2000). Young children's social competence and relationships with teachers: Pathways to early academic success. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 61*(6-A), 2189.

Vazquez Nuttall, E., & Nuttall, R.L. (1976). Parent-child relationships and effective academic motivation. *Journal of Psychology: Interdisciplinary & Applied, 94*(1), 127-133.

Walker, J.P., & Lee, R.E. (1998). Uncovering strengths of children of alcoholic parents. *Contemporary Family Therapy, 20*(4), 521 – 538.

Walrath, C.M., Mandell, D.S., Holden, E.W., & Santiago, R.L. (2004). Assessing the strengths of children referred for community-based mental health services. *Mental Health Services Research, 6*(1), 1- 8.

Welsh, J.L. (2003). The application and review of a strength-based program in classrooms with behavior disordered children. Unpublished master's thesis, Lakehead University, Thunder Bay, ON.

Yip, K.S. (2003). A strengths perspective in working with an adolescent with dual diagnosis. *Clinical Social Work Journal, 31*(2), 189-203.

Appendices

Appendix A. Teacher Rating Scale (TRS) of the BERS 2.

Appendix B. Modified version of the Strength Assessment Inventory (SAI).

Appendix C: Teacher Report Form (TRF) of the ASEBA.

Appendix D: Teacher's information sheet.

Appendix E: Teacher's consent form.

Appendix F: Parent information sheet.

Appendix G: Parent consent form.

Teacher Rating Scale

Section 1. Identifying Information

Name _____ Female ☐ Male ☐ Grade _____

Date Rated _____ School _____

Date of Birth _____ Rater's Name _____

Age _____ Rater's Relationship to Individual _____

Section 2. Score Summary

EBD Norms ☐ NEBD Norms ☐

	Raw Score	%ile Rank	Scaled Score
I. Interpersonal Strength (IS)			
II. Family Involvement (FI)			
III. Intrapersonal Strength (IaS)			
IV. School Functioning (SF)			
V. Affective Strength (AS)			
Sum of Scaled Scores			
BERS–2 Strength Index			

Section 3. Interpretation and Recommendations

_____

_____

_____

_____

Section 4. Other Pertinent Information

Who referred the student? _____

What was the reason for the referral? _____

Parental permission obtained on (date) _____

BERS–2 results included in staffing or planning conference? ☐ Yes ☐ No

1 2 3 4 5 08 07 06 05 04

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Modified Strength Assessment Inventory (SAI) for Children and Adolescents

Strength in School Functioning

	Not At All	Sometimes	Often	Very Often	Does Not Apply
Uses listening skills in school.					
Pays attention in class.					
Works independently in the classroom when appropriate.					
Completes homework assignments.					
Achieves at or above grade level in reading.					
Completes work on time in the classroom.					
Has a positive relationship with school staff.					
Gets involved in school sports (e.g., tries out for teams, supports teams).					
Gets involved in school activities.					
Seems to enjoy school.					
Attends classes.					
Arrives on time for classes.					

Strength in Leisure/Recreational Activities

	Not At All	Sometimes	Often	Very Often	Does Not Apply
Likes to watch non-violent sports on T.V. (e.g., football, baseball, hockey).					
Is a fan of a sports team.					
Watches an educational T.V. show.					
Participates in a particular sport outside of school.					
Enjoys listening to music.					
Plays a musical instrument.					
Likes to read.					
Likes to write (e.g., poems, stories, journal entries).					
Uses the computer for age-appropriate activities.					
Enjoys artistic activities (e.g., photography, drawing, crafts).					
Participates in community activities.					
Can find appropriate activities when bored.					
Participates in physical activity (e.g., going for walks, bike rides, roller blading).					
Enjoys baking or cooking.					
Enjoys games (e.g., board games, card games, age-appropriate video games).					
Is willing to try new activities.					
Enjoys outdoor activities (e.g., hunting, fishing, camping).					
Enjoys other hobbies (e.g., card collecting, scrap booking).					

Strength in Peer Relationships

	Not At All	Sometimes	Often	Very Often	Does Not Apply
Associates with positive peer group.					
Experiences concern for peers.					
Is open and honest with peers.					
Demonstrates leadership with peers.					
Is accepted by peers.					
Interacts positively with peer group.					
Determines safe and unsafe behaviours and makes choices for self in peer group.					
Handles conflict with peers effectively and safely.					
Knows when to access adult assistance for peer struggles.					
Is particularly close to one or more friend.					

Strength in Personality Functioning

	Not At All	Sometimes	Often	Very Often	Does Not Apply
Demonstrates a sense of humour.					
Is enthusiastic about life.					
Is open to new experiences.					
Has a positive attitude towards life.					
Uses anger management skills.					
Can identify his/her personal strengths.					
Is appropriately confident.					
Can accept disappointments.					
Can accept positive and/or negative feedback.					
Tries to compensate positively for his/her weakness.					
Has a good sense of right from wrong.					
Is willing to ask for help when needed.					
Demonstrates effective problem solving skills.					
Demonstrates creativity or artistic skills.					
Evaluates own behaviours.					
Has a positive body image.					
Is able to cope with strong emotions (such as sadness and grief).					
Is able to self-regulate emotions.					

Strengths in Personal and Physical Care

	Not At All	Sometimes	Often	Very Often	Does Not Apply
Participates in fitness activities.					
Has good personal hygiene.					
Has good eating habits.					
Has good sleeping habits.					
Keeps personal space clean.					
Keeps personal space tidy.					
Has an interest in fashion/style.					
Takes medications as prescribed.					

TEACHER'S REPORT FORM FOR AGES 6-18

For office use only
ID #

Your answers will be used to compare the pupil with other pupils whose teachers have completed similar forms. The information from this form will also be used for comparison with other information about this pupil. Please answer as well as you can, even if you lack full information. Scores on individual items will be combined to identify general patterns of behavior. Feel free to print additional comments beside each item and in the spaces provided on page 2. ***Please print, and answer all items.***

PUPIL'S FULL NAME First Middle Last

PUPIL'S GENDER ☐ Boy ☐ Girl | PUPIL'S AGE | PUPIL'S ETHNIC GROUP OR RACE

TODAY'S DATE Mo._____ Date_____ Yr._____

PUPIL'S BIRTHDATE (if known) Mo._____ Date_____ Yr._____

GRADE IN SCHOOL _____

NAME AND ADDRESS OF SCHOOL _____

PARENTS' USUAL TYPE OF WORK, even if not working now *(Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)*

FATHER'S TYPE OF WORK _____

MOTHER'S TYPE OF WORK _____

THIS FORM FILLED OUT BY: (*print your full name*)

Your gender: ☐ Male ☐ Female

Your role at the school:

☐ Classroom Teacher ☐ Counselor
☐ Special Educator ☐ Administrator
☐ Teacher's Aide ☐ Other (specify):

I. For how many months have you known this pupil? _____ months

II. How well do you know him/her? 1. ☐ Not Well 2. ☐ Moderately Well 3. ☐ Very Well

III. How much time does he/she spend in your class or service per week?

IV. What kind of class or service is it? (Please be specific, e.g., regular 5th grade, 7th grade math, learning disability, counseling, etc.)

V. Has he/she ever been referred for special class placement, services, or tutoring?

☐ Don't Know 0. ☐ No 1. ☐ Yes — what kind and when?

VI. Has he/she repeated any grades? ☐ Don't Know 0. ☐ No 1. ☐ Yes — grades and reasons:

VII. Current academic performance — list academic subjects and check box that indicates pupil's performance for each subject:

Academic subject	1. Far below grade	2. Somewhat below grade	3. At grade level	4. Somewhat above grade	5. Far above grade
1. _____	☐	☐	☐	☐	☐
2. _____	☐	☐	☐	☐	☐
3. _____	☐	☐	☐	☐	☐
4. _____	☐	☐	☐	☐	☐
5. _____	☐	☐	☐	☐	☐
6. _____	☐	☐	☐	☐	☐

Be sure you answered all items. Then see other side.

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Please print. Be sure to answer all items.

Below is a list of items that describe pupils. For each item that describes the pupil ***now or within the past 2 months,*** please circle the **2** if the item is ***very true or often true*** of the pupil. Circle the ***1*** if the item is ***somewhat or sometimes true*** of the pupil. If the item is ***not true*** of the pupil, circle the ***0***. Please answer all items as well as you can, even if some do not seem to apply to this pupil.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 1. Acts too young for his/her age
0 1 2 2. Hums or makes other odd noises in class
0 1 2 3. Argues a lot
0 1 2 4. Fails to finish things he/she starts
0 1 2 5. There is very little that he/she enjoys
0 1 2 6. Defiant, talks back to staff
0 1 2 7. Bragging, boasting
0 1 2 8. Can't concentrate, can't pay attention for long
0 1 2 9. Can't get his/her mind off certain thoughts; obsessions (describe): _____
_____
0 1 2 10. Can't sit still, restless, or hyperactive
0 1 2 11. Clings to adults or too dependent
0 1 2 12. Complains of loneliness
0 1 2 13. Confused or seems to be in a fog
0 1 2 14. Cries a lot
0 1 2 15. Fidgets
0 1 2 16. Cruelty, bullying, or meanness to others
0 1 2 17. Daydreams or gets lost in his/her thoughts
0 1 2 18. Deliberately harms self or attempts suicide
0 1 2 19. Demands a lot of attention
0 1 2 20. Destroys his/her own things
0 1 2 21. Destroys property belonging to others
0 1 2 22. Difficulty following directions
0 1 2 23. Disobedient at school
0 1 2 24. Disturbs other pupils
0 1 2 25. Doesn't get along with other pupils
0 1 2 26. Doesn't seem to feel guilty after misbehaving
0 1 2 27. Easily jealous
0 1 2 28. Breaks school rules
0 1 2 29. Fears certain animals, situations, or places other than school (describe):_____
_____
0 1 2 30. Fears going to school
0 1 2 31. Fears he/she might think or do something bad
0 1 2 32. Feels he/she has to be perfect
0 1 2 33. Feels or complains that no one loves him/her
0 1 2 34. Feels others are out to get him/her
0 1 2 35. Feels worthless or inferior
0 1 2 36. Gets hurt a lot, accident-prone
0 1 2 37. Gets in many fights
0 1 2 38. Gets teased a lot
0 1 2 39. Hangs around with others who get in trouble
0 1 2 40. Hears sounds or voices that aren't there (describe):_____
_____
0 1 2 41. Impulsive or acts without thinking
0 1 2 42. Would rather be alone than with others
0 1 2 43. Lying or cheating
0 1 2 44. Bites fingernails
0 1 2 45. Nervous, high-strung, or tense
0 1 2 46. Nervous movements or twitching (describe): _____
_____
0 1 2 47. Overconforms to rules
0 1 2 48. Not liked by other pupils
0 1 2 49. Has difficulty learning
0 1 2 50. Too fearful or anxious
0 1 2 51. Feels dizzy or lightheaded
0 1 2 52. Feels too guilty
0 1 2 53. Talks out of turn
0 1 2 54. Overtired without good reason
0 1 2 55. Overweight
56. Physical problems ***without known medical cause:***
0 1 2 a. Aches or pains (***not*** stomach or headaches)
0 1 2 b. Headaches
0 1 2 c. Nausea, feels sick
0 1 2 d. Eye problems (***not*** if corrected by glasses) (describe):_____
_____
0 1 2 e. Rashes or other skin problems
0 1 2 f. Stomachaches
0 1 2 g. Vomiting, throwing up
0 1 2 h. Other (describe):_____
_____
_____

 Be sure you answered all items. Then see other side.

Please print. Be sure to answer all items.

VIII. Compared to typical pupils of the same age:	**1. Much less**	**2. Somewhat less**	**3. Slightly less**	**4. About average**	**5. Slightly more**	**6. Somewhat more**	**7. Much more**
1. How hard is he/she working?	❐	❐	❐	❐	❐	❐	❐
2. How appropriately is he/she behaving?	❐	❐	❐	❐	❐	❐	❐
3. How much is he/she learning?	❐	❐	❐	❐	❐	❐	❐
4. How happy is he/she?	❐	❐	❐	❐	❐	❐	❐

IX. Most recent achievement test scores (optional):

Name of test	Subject	Date	Percentile or grade level obtained

X. IQ, readiness, or aptitude tests (optional):

Name of test	Date	IQ or equivalent scores

Does this pupil have any illness or disability (either physical or mental)? ❐ No ❐ Yes— please describe:

What concerns you most about this pupil?

Please describe the best things about this pupil:

Please feel free to write any comments about this pupil's work, behavior, or potential, using extra pages if necessary.

Please print. Be sure to answer all items.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 57. Physically attacks people
0 1 2 58. Picks nose, skin, or other parts of body (describe):_____
_____
0 1 2 59. Sleeps in class
0 1 2 60. Apathetic or unmotivated
0 1 2 61. Poor school work
0 1 2 62. Poorly coordinated or clumsy
0 1 2 63. Prefers being with older children or youths
0 1 2 64. Prefers being with younger children
0 1 2 65. Refuses to talk
0 1 2 66. Repeats certain acts over and over; compulsions (describe):_____
_____
0 1 2 67. Disrupts class discipline
0 1 2 68. Screams a lot
0 1 2 69. Secretive, keeps things to self
0 1 2 70. Sees things that aren't there (describe):
_____
_____
0 1 2 71. Self-conscious or easily embarrassed
0 1 2 72. Messy work
0 1 2 73. Behaves irresponsibly (describe):_____
_____
_____
0 1 2 74. Showing off or clowning
0 1 2 75. Too shy or timid
0 1 2 76. Explosive and unpredictable behavior
0 1 2 77. Demands must be met immediately, easily frustrated
0 1 2 78. Inattentive or easily distracted
0 1 2 79. Speech problem (describe):_____
_____
0 1 2 80. Stares blankly
0 1 2 81. Feels hurt when criticized
0 1 2 82. Steals
0 1 2 83. Stores up too many things he/she doesn't need (describe):_____
_____
_____
0 1 2 84. Strange behavior (describe):_____
_____
0 1 2 85. Strange ideas (describe):_____
_____
0 1 2 86. Stubborn, sullen, or irritable
0 1 2 87. Sudden changes in mood or feelings
0 1 2 88. Sulks a lot
0 1 2 89. Suspicious
0 1 2 90. Swearing or obscene language
0 1 2 91. Talks about killing self
0 1 2 92. Underachieving, not working up to potential
0 1 2 93. Talks too much
0 1 2 94. Teases a lot
0 1 2 95. Temper tantrums or hot temper
0 1 2 96. Seems preoccupied with sex
0 1 2 97. Threatens people
0 1 2 98. Tardy to school or class
0 1 2 99. Smokes, chews, or sniffs tobacco
0 1 2 100. Fails to carry out assigned tasks
0 1 2 101. Truancy or unexplained absence
0 1 2 102. Underactive, slow moving, or lacks energy
0 1 2 103. Unhappy, sad, or depressed
0 1 2 104. Unusually loud
0 1 2 105. Uses alcohol or drugs for nonmedical purposes (***don't*** include tobacco) (describe):_____
_____
0 1 2 106. Overly anxious to please
0 1 2 107. Dislikes school
0 1 2 108. Is afraid of making mistakes
0 1 2 109. Whining
0 1 2 110. Unclean personal appearance
0 1 2 111. Withdrawn, doesn't get involved with others
0 1 2 112. Worries
113. Please write in any problems the pupil has that were not listed above.
0 1 2 _____
0 1 2 _____
0 1 2 _____

Please be sure you answered all items.

Lakehead
UNIVERSITY

Department of Psychology

Work: (807) 343-8441
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The Role of Strengths in Classroom Performance and Behavior

Dear Teacher,

Researchers at Lakehead University are interested in studying the relationship between young students' strengths, their school performance, and classroom behavior. The purpose of this study is to allow us to gather more information about strengths so that we are better able to help students use their strengths to their advantage. With increased knowledge in this area, we may be better equipped to help students succeed in areas where they typically have experienced failure.

In order to obtain the necessary information about your students' strengths, performance, and behaviors, we will need your help. We are asking all grade 1 and 2 teachers at your school to complete 3 questionnaires about each of your students between the ages of 6 and 8 years old. If you agree to participate, you will only be able to complete questionnaires for those students who return a signed consent form from their parents. Once you know how many parents have agreed to allow you to participate, you will receive the necessary number of questionnaire packages, and you will be asked to complete one for each child. Each questionnaire package includes 2 measures of the child's strengths (The Behavioral and Emotional Rating Scale, and the Strength Assessment Inventory), and one measure assessing both, their behavior and their performance (The Teacher Report Form). Each questionnaire package will take approximately 1 hour to complete.

We realize that as a schoolteacher the time you have to devote to this research may be limited, however, we are willing to make any accommodations necessary. You will be given the questionnaire packages for as long as necessary, up to a period of 2 months. During these 2 months we ask that you do not complete more than 2 questionnaire packages per day. If you feel it is impossible to complete all of the packages in the 2 month time period, you may still participate by submitting data for a random sample of the students in your class. For example, you may only choose to submit data for every second student on the list of those who consented to be in the study.

While a negative side effect of participating may be that it is somewhat time consuming, there are also many benefits. This research will hopefully lead to the development of programs that help students having difficulties with performance or behavior in the classroom. By understanding student's strengths we may be able to help them overcome challenges in areas of difficulty. In the long run this will also benefit teachers in that they may have to spend less time focusing on disruptive/inattentive students.

While the long-term benefits of participating will exceed the short-term costs, you may find that through the course of the study you wish to withdraw your consent. Remember that you have the

right to withdraw your consent at any time, and you may do so without penalty or any negative consequence.

If you agree to participate in the current study, the data you provide will not be linked to you in any way. Your name and the names of your students will be replaced with random ID numbers so that all parties involved may remain anonymous. The information you provide about your students will be kept confidential and will be stored in a secure place at Lakehead University for a period of seven years.

If you wish to participate, please sign and return the attached consent form to your principal by no later than _____. Following the approval of your consent, you will be provided with consent forms to send home with your students. Tally the number of students who return their signed consent forms within one week, and you will then be provided with the appropriate number of questionnaire packages. Remember, you are only able to complete packages for those children whose parents have given their consent.

Once the data is collected, it will be analyzed to explore whether or not the aforementioned variables are related. If you wish to receive a copy of the findings, or have any questions you may contact me, Melissa Pye, at mfpye@lakeheadu.ca or by phone at (807) 476-0542. Also, please do not hesitate to contact my thesis supervisor, Dr. Ed Rawana at (807) 343-8453, with any questions or concerns you may have.

Thank you,

Melissa Pye, B.Sc. Honors Psychology
MA Clinical Student

Edward P. Rawana, PhD, C Psych
Assistant Professor

Lakehead
UNIVERSITY

Department of Psychology

Melissa Pye
(807) 476-0542
mfpye@lakeheadu.ca

Consent Form

My signature on this form indicates whether or not I agree to complete questionnaires regarding the strengths and classroom behavior of my students. My signature also indicates that I agree to allow this information to be used by Melissa Pye and Dr. Edward Rawana for the purpose of studying the relationship between strengths, classroom performance, and classroom behavior. My signature on this form also indicates that I understand the following:

1) I may withdraw my consent at any time. If I choose to do so, none of the information I provided about my students will be used, and there will be no negative consequences to my students or myself.
2) If I give information about my students' strengths and behavior to researchers, there is no known risk of physical or psychological harm to him/her or myself.
3) The information about my students will not be shared with any other parties.
4) If I release information about my students to researchers, I will receive a summary of the results of the study, upon request, following the completion of the study.
5) The information I provide will be kept in a secure place at Lakehead University for a period of seven years.

I have received explanations about the nature of the study, its purpose, and procedures.

_____ I agree to provide information about my students

_____ I do not agree to provide information about my students

_____ _____

Name of Teacher (Please Print) School Name

_____ _____

Signature of Teacher Date

Lakehead
UNIVERSITY

Department of Psychology

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(807) 476-0542
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The Role of Strengths in Classroom Performance and Behavior

Dear Parents or Guardians,

Researchers at Lakehead University are interested in identifying the competencies and strengths of young students, as perceived by their teachers. We are also interested in exploring the relationship between students' strengths, their academic performance, and classroom behavior. In order to conduct our study, we need your permission.

Your consent is needed in order for your child's teacher to provide us with information regarding him/her. We hope that you will allow your child's teacher to complete several questionnaires about your child. These questionnaires will focus on your child's strengths, your child's academic performance, and your child's behavior in the classroom. Neither you, nor your child, will be asked to complete any questionnaires or devote any time or effort to this project.

If your permission is given, the information provided to researchers about your child will be kept in strict confidence between the teacher and the researchers involved in the project at Lakehead University. Both your child's name and the name of his/her teacher will be anonymous: All data will be summarized in a group format. Data will be stored in a secure manner and your child's name will be replaced with an ID number once the information is collected from the teacher. Although this data will be stored at Lakehead University for a period of seven years, no other parties will have access to information about your child and your child's name will not be connected to their data in any way.

If you wish to give permission for your child's teacher to participate, please sign and return the attached consent form to your child's teacher as early as possible. Once the data is collected, it will be analyzed to explore whether or not the aforementioned variables are related. If you wish to receive a copy of the findings, or if you have any questions, you may contact me, Melissa Pye, at mfpye@lakeheadu.ca or by phone at (807) 476-0542. Also please do not hesitate to contact my thesis supervisor, Dr. Ed Rawana at (807) 343-8453, with any questions you may have.

Thank you,
Melissa

Melissa Pye, B.Sc. Honors Psychology
MA Clinical Student

Edward P. Rawana, PhD, C Psych
Assistant Professor

Lakehead
UNIVERSITY

Department of Psychology

Melissa Pye
(807) 476-0542
mfpye@lakeheadu.ca

Consent Form

My signature on this form indicates whether or not I agree to have information about my child provided to Melissa Pye and Dr. Edward Rawana for the purpose of studying the relationship between strengths, classroom performance, and classroom behavior. My signature on this form also indicates that I understand the following:

1) I may withdraw my consent at any time. If I choose to do so, no further information about my child will be provided to researchers, previously released information will not be used, and there will be no negative consequences to myself or my child.
2) If I agree to allow information about my child's strengths, performance, and behavior to be given to researchers, there is no known risk of physical or psychological harm to him/her.
3) The information about my child, provided by their teacher to researchers, will not be shared with any other parties.
4) If I allow information about my child to be released to researchers, I will receive a summary of the results of the study, upon request, following the completion of the study.
5) The information provided by my child's teacher will be kept in a secure place at Lakehead University for a period of seven years.

I have received explanations about the nature of the study, its purpose, and procedures.

_____ I agree to allow my child's teacher to release information about my child

_____ I do not agree to have information about my child given to researchers

_____ _____

Name of Child (Please Print) Name of Parent or Guardian (Please Print)

_____ _____

Signature of Parent or Guardian Date

Table 1.

Descriptive Statistics Outlining the Distribution of Raw Scores on the Five Subscales of the TRS

Subscale	N	Minimum	Maximum	Standard Deviation
Interpersonal Strength (IS)	54	6	16	2.703
Family Involvement (FI)	42	9	16	1.937
Intrapersonal Strength (IaS)	53	8	17	2.659
School Functioning (SF)	54	4	15	2.875
Affective Strength (AS)	53	7	17	2.655

Table 2.

Descriptive Statistics Outlining the Distribution of Raw Scores on the Five Subscales of the SAI

Subscale	N	Minimum	Maximum	Standard Deviation
School Functioning (SF)	54	31	100	21.099
Leisure and Recreation (LR)	32	32	98	14.629
Peer Relations (PR)	54	27	100	22.426
Personality Functioning (PF)	53	32	100	20.795
Personal Care (PC)	53	29	100	21.841

Table 3.

Intercorrelations Between TRS Subscales for the Combined Sample, and Both Females and Males

Subscale	1	2	3	4
	Combined sample (N=54)			
1. Interpersonal Strengths	—			
2. Intrapersonal Strengths	.737**	—		
3. School Functioning	.618**	.712**	—	
4. Affective Strengths	.699**	.855**	.498**	—
	Females (n=28)			
1. Interpersonal Strengths	—			
2. Intrapersonal Strengths	.673**	—		
3. School Functioning	.315	.453*	—	
4. Affective Strengths	.604**	.753**	.222	—
	Males (n=26)			
1. Interpersonal Strengths	—			
2. Intrapersonal Strengths	.814**	—		
3. School Functioning	.779**	.780**	—	
4. Affective Strengths	.780**	.873**	.545**	—

*p<.05

**p<.01

Table 4.

Intercorrelations Between Academic Variables for the Combined Sample, and Both Females and Males

Subscale	1	2	3
	Combined sample (N=54)		
1. Reading	—		
2. Writing	.740**	—	
3. Math	.738**	.741**	—
	Females (n=28)		
1. Reading	—		
2. Writing	.784**	—	
3. Math	.723**	.695**	—
	Males (n=26)		
1. Reading	—		
2. Writing	.651**	—	
3. Math	.687**	.725**	—

*p<.05

**p<.01

Table 5.

Correlations Between Variables in the Strengths Set and Variables in the Behavior Set

Subscale	Math	Reading	Writing
	Combined sample (N=54)		
Interpersonal Strengths	.411**	.299*	.417**
Intrapersonal Strengths	.484**	.380**	.471**
School Functioning	.754**	.634**	.643**
Affective Strengths	.304*	.149	.309*
	Females (n=28)		
Interpersonal Strengths	.144	.009	.262
Intrapersonal Strengths	.367	.062	.296
School Functioning	.804**	.662**	.736**
Affective Strengths	.206	-.130	.002
	Males (n=26)		
Interpersonal Strengths	.524**	.416*	.505**
Intrapersonal Strengths	.449*	.426*	.500*
School Functioning	.666**	.538**	.478*
Affective Strengths	.225	.146	.384

*p<.05

**p<.01

Table 6.

Correlations Between Variables in the Strengths Set and Variables in the Behavior Set

Subscale	Internalizing	Externalizing
Combined sample (N=54)		
Interpersonal Strengths	-.239	-.672**
Intrapersonal Strengths	-.332*	-.368**
School Functioning	-.434**	-.421**
Affective Strengths	-.233	-.300*
Females (n=28)		
Interpersonal Strengths	.165	-.599**
Intrapersonal Strengths	-.055	-.364
School Functioning	-.104	-.380*
Affective Strengths	.016	-.056
Males (n=26)		
Interpersonal Strengths	-.416*	-.743**
Intrapersonal Strengths	-.348	-.433*
School Functioning	-.483*	-.485*
Affective Strengths	-.228	-.511**

*p<.05

**p<.01

Table 7. *Correlations Between TRS Subscales and Totals and SAI Subscales and Totals for The Combined Sample*

	Subscales	1	2	3	4	5	6	7	8	9	10	11	12
BERS	1 Interpersonal	—											
	2 Intrapersonal	.737**	—										
	3 School	.618**	.712**	—									
	4 Family	.597**	.783**	.559**	—								
	5 Affective	.699**	.855**	.498**	.645**	—							
	6 Total	.825**	.964**	.800**	.803**	.852**	—						
SAI	7 School	.577**	.664**	.795**	.641**	.455**	.805**	—					
	8 Peer	.723**	.681**	.616**	.585**	.617**	.763**	.760**	—				
	9 Personality	.683**	.750**	.622**	.635**	.664**	.797**	.782**	.885**	—			
	10 Leisure	.336	.610**	.558**	.583**	.572**	.572**	.599**	.588**	.742**	—		
	11 Personal Care	.438**	.560**	.629**	.448**	.452**	.651**	.723**	.598**	.697**	.596**	—	
	12 Total	.599**	.825**	.823**	.655**	.717**	.805**	.869**	.869**	.952**	.833**	.739**	—

Table 8. *Correlations Between TRS Subscales and Totals and SAI Subscales and Totals for The Female Sample*

	Subscales	1	2	3	4	5	6	7	8	9	10	11	12
BERS	1 Interpersonal	—											
	2 Intrapersonal	.673**	—										
	3 School	.315	.453*	—									
	4 Family	.515*	.879**	.474*	—								
	5 Affective	.604**	.753**	.222	.613**	—							
	6 Total	.742**	.930**	.546**	.901**	.798**	—						
SAI	7 School	.213	.319	.552**	.589**	-.015	.459*	—					
	8 Peer	.783**	.704**	.407*	.635**	.532**	.795**	.591**	—				
	9 Personality	.623**	.713**	.356	.612**	.515**	.741**	.569**	.896**	—			
	10 Leisure	.198	.753**	.449	.714**	.730**	.693**	.466	.484*	.672**	—		
	11 Personal Care	.267	.500**	.359	.758**	.219	.682**	.657**	.625**	.697**	.731**	—	
	12 Total	.523*	.869**	.708**	.760**	.645**	.814**	.699**	.823**	.919**	.826**	.836**	—

Table 9. *Correlations Between TRS Subscales and Totals and SAI Subscales and Totals for The Male Sample*

	Subscales	1	2	3	4	5	6	7	8	9	10	11	12
BERS	1 Interpersonal	—											
	2 Intrapersonal	.814**	—										
	3 School	.779**	.780**	—									
	4 Family	.651**	.748**	.568**	—								
	5 Affective	.780**	.873**	.545**	.638**	—							
	6 Total	.945**	.968**	.864**	.777**	.860**	—						
SAI	7 School	.795**	.768**	.878**	.658**	.588**	.892**	—					
	8 Peer	.690**	.617**	.624**	.525*	.584**	.722**	.771**	—				
	9 Personality	.743**	.740**	.707**	.625*	.690**	.803**	.867**	.838**	—			
	10 Leisure	.473	.526*	.603**	.453	.425	.487	.702**	.634*	.806**	—		
	11 Personal Care	.544**	.485*	.670**	.262	.426*	.561*	.654**	.401*	.598**	.463	—	
	12 Total	.757**	.809**	.824**	.585*	.746**	.780**	.918**	.863**	.958**	.880**	.487	—